COUPLING OF CONDUCTIVE VIAS TO COMPLEX POWER-SIGNAL SUBSTRUCTURES

SUB B1

Abstract of the Disclosure

An electrical structure, and associated method of formation, that includes a complex power-signal (CPS) substructure. The CPS substructure is formed and tested to determine whether the CPS substructure satisfies electrical performance acceptance requirements. The testing includes testing for electrical shorts, electrical opens, erroneous impedances, and electrical signal delay. If the CPS substructure passes the tests, then a dielectric-metallic (DM) laminate is formed on an external surface of the CPS substructure. The DM laminate includes an alternating sequence of an equal number N of dielectric layers and metallic layers such that a first dielectric layer of the N dielectric layers is formed on an external surface of the CPS substructure. N is at least 2. A multilevel conductive via is formed through the DM laminate and is electrically coupled to a metal layer of the CPS substructure.